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EXAMINER	
NOORISTANY, SULAIMAN	

ART UNIT	PAPER NUMBER
2446	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/529,085	SCHRAMM ET AL.	
	Examiner	Art Unit	
	SULAIMAN NOORISTANY	2446	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19,21-24 and 27-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19,21-24 and 27-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

This Office Action is response to the application (10529085) filed on 07/1/2010

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a), which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-19, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **RUTLEDGE L**: "SMIL 2.0: XML for Web multimedia" IEEE INTERNET COMPUTING, IEEE SERVICE CENTER, PISCATAWAY, September 2001, in view of **Epstein** U.S Patent No. **US 7058802** further in view of **Yoshimura: "**Mobile Streaming Media CDN Enabled by Dynamic SMIL**", MAY 2002.**

Regarding claim 1, Rutledge teaches wherein a method for describing adaptive mobile multimedia applications or presentations, whose playback behavior depends on a current quality of service (QoS) during playback the method being based on an XML-based document model and comprising

the describing intrinsic adaptation possibilities of application or presentations, which run in a network environment **(SMIL's HTML-like syntax aims to do for multimedia that bring it into every living room, which an easy-to-author**

descriptive format that works with readily available cross-platform players – page. 78. para."SMIL 2.0 XML for Web Multimedia"), in an Adaptation Module including a programming language structure **(Fig. 2, the system language (attribute or structure)**, required for describing the adaptation possibilities of said adaptive applications **(e.g., SMIL helps you achieving this through adaptively, letting you tailor content according to characteristics such as language "is here considered as syntax", perceptual ability, and computing environment -- page. 81. para. Adaptively "e.g., multimedia is accessible to users by offering a spoken account or visual presentation elements.**

However, Rutledge does not explicitly disclose the terms 'mobile network;

'playing back an initial continuous media item during the current QoS;

specifying alternative media items to be reproduced when a change in the current QoS during playback prevents the initial continuous media from being played back, said alternative media items being specified with a choose element having a startmode attribute which specifies a playtime at which reproduction is started for a continuous media item of the alternative media items after an adaption to the change in the current QoS; and

after adaption to the change in the current QoS, playing back the continuous media item of the alternative media items according to the startmode attribute instead of the initial continuous media item.'

Epstein teaches that it is well known to have a system wherein application or presentations, which run in a mobile network **(e.g., Fig. 1, unit 50);**

'playing back an initial continuous media item during the current QoS **(Fig. 1-2, e.g., initiation of sessions Continued efforts to standardize data broadcasting and digital video broadcasting has resulted in current standards that are found in the following one of a plurality of service-levels)**;

specifying alternative media items to be reproduced when a change in the current QoS during playback prevents the initial continuous media from being played back **(Fig. 1-2, e.g., initiation of sessions or change of sessions, the session manager 210 entitles each of the user units 30 and the servers 40 that initiate a session or make a change in a session to one of a plurality of service-levels, e.g., downgrading to an available service-level that is lower in the QOS hierarchy than the one of the plurality of service-levels);**

after adaption to the change in the current QoS **(e.g., downgrading to an available service-level that is lower in the QOS hierarchy than the one of the plurality of service-levels – col. 7, lines 57-60)**, playing back the continuous media item of the alternative media items according to the startmode attribute instead of the initial continuous media item **(Fig. 4, e.g., and transmitting the encrypted data uniquely associated with the service-level that is lower in the QOS hierarchy to users entitled to the one of the plurality of service-levels)** in order to make the system more efficient.

Thus, it would have been obvious to one ordinary skill in the art to modify Rutledges' invention by utilizing a method including preparing data for transmission at

one of the plurality of service-levels by uniquely associating a service-level encryption key with the one of the plurality of service-levels, as taught by Epstein.

However, Epstein does not explicitly disclose the terms 'said alternative media items being specified with a choose element having a startmode attribute which specifies a playtime'

Yoshimura teaches that it is well known to have system wherein alternative media items being specified with a choose element having a startmode attribute which specifies a playtime at which reproduction is started for a continuous media item of the alternative media items after an adaption to the change in the current QoS **(e.g., section 5. 'PRE-FETCH SCHEDULING'; Fig. 3-9 'segmentation')** in order to make a mobile streaming media CDN (MSM-CDN) that enhances streaming media quality for mobile clients while utilizing network resources efficiently and supporting client mobility in an integrated and practical way.

Thus, a mobile streaming media CDN architecture in which all of the technologies related to CDN are enabled by SMIL modification. In this architecture, mobile clients simply follow the SMIL file downloaded from the streaming portal server, and this leads to multimedia content delivery from the best surrogates in the CDN and when the client restarts the streaming, the surrogate notifies CLM of the restart. CLM recalculates the start time and the request times for each segment, and changes the pre-fetch status to ACTIVE. The same procedure is taken when the client skips or goes back to the segments, as taught by Yoshimura (Fig. 9).

Regarding claim 2, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge teaches wherein further comprising describing the alternative available media items in a MediaItems Module and including the **("e.g., Fig. 1. Display of Fiet greeting section, set for Dutuch caption, on GRiNS player "here is same as mediaItems module that run media" for SMIL 2.0. Display of Fiets thumbnail section, on RealPlayer "here is same as mediaItems module that run the media")** including the programming language structure required for describing the alternative media items used within said adaptive applications **("e.g., Fig. 2, in Fiet, used the system language (attribute or structure) Fig. 2, in Fiet, used the system language (attribute or structure).**

Regarding claim 3, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge teaches wherein furthermore comprising the step of describing interaction parameters of the application or presentation in an Interactions Module **(Fig. 3, SMIL layout module that let user position regions within containing blocks. Page. 81)** including the programming language structure required for describing interaction possibilities used for said adaptive applications **(e.g., Fig. 1a-1b show an example SMIL presentation ....intractive multimedia tour of Amsterdam "e.g., Fig. 1. Display of Fiet greeting section, set for Dutuch caption, on GRiNS player for SMIL 2.0. Display of Fiets thumbnail section, on RealPlayer)**.

Regarding claim 5, Rutledge, Epstein and Yoshimura taught the method according to claim 4 above. Rutledge further teaches wherein furthermore comprising the step of changing the programming language structure of modules in an Events Module

including the programming language structure required for describing event possibilities used in said mobile applications **(Fig. 1a-1b show an example SMIL presentation "e.g., user can select either English or Dutch language for hearing the Fiet shows closed caption through the button on the display "Button here is considered as even module" – page. 78-79)**.

Regarding claim 6, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein furthermore comprising describing an association between the Adaptation Module and a MediaItems Module, represented by a link **(Linking "e.g., in HTMAL, SMIL's primary linking constructs are the element contains media that user can click (or otherwise activate) to rigger the link"– page. 82)**.

Regarding claim 7, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein furthermore comprising: describing an association between the Adaptation Module and an Interactions Module, represented by a link **(Linking "e.g., URI to the content is triggered by the link, such another SMIL presentation where the SMIL's hyperlinking construct provide the key navigation path for user to traverse through the web multimedia"– page. 82)**.

Regarding claim 8, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein a method as described in claim 1, wherein the programming language comprises:

at least one MediaItems Module serving as a description unit for the alternative media items within said multimedia applications **(SMIL's features fall into five categories: media content, layout, timing, linking, and adaptively – page. 78-83)**,

at least one Layout Module which organizes said alternative media items into regions on the visual rendering surface of a mobile display device **(SMIL's features fall into five categories: media content, layout, timing, linking, and adaptively – page. 78-83)**, and

the Adaptation Module controls a context-aware adaptation of distributed multimedia applications by referencing elements of the MediaItems Module **(SMIL's features fall into five categories: media content, layout, timing, linking, and adaptively – page. 78-83)**.

Regarding claim 9, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein the programming language further comprises: at least one Constraints Module which allows adding additional constraints to adaptation description elements, and at least one Events Module which allows for a reaction on changes of various resources encompassing user's physical environment, user's context, quality-of-service (QoS) conditions of the applied networks, and mobile device capabilities **(The QoS management server has SOAP interfaces for QoS policy setup, traffic monitoring, and event notifications – Fig. 14, page. 658)**.

Regarding claim 10, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein said middleware framework allows

each running mobile multimedia application to specify media each running mobile applications wants to use and the relationships between these media, calculates the adaptation possibilities of mobile multimedia applications and controls an adaptation process **(a mobile QoS testbed called "MOBIQ – Fig. 14).**

Regarding claim 11, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein characterized by the step of modifying the linking structure between the Adaptation Module and the MediaItems Module in case when the current QoS has changed **(link conditions are dynamically changed depending on the time and place – page. 652)**.

Regarding claim 12, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein characterized by the step of modifying the linking structure between the MediaItems Module and the Layout Module in case when the current situation has changed **(Fig. 5. Modified SMIL file after content segmentation)**.

Regarding claim 13, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein modifying [[the]] a linking structure between the Interactions Module and the Layout Module when the current situation OoS has changed (**Fig. 6. Request routing procedure by SMIL modification)**.

Regarding claim 14, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein modifying at least one of a document linking structure and/or the and a document structure modified by user interactions

(SMIL's HTML-like syntax aims to do for multimedia that bring it into every living room, which an easy-to-author descriptive format that works with readily available cross-platform players – page. 78. para."SMIL 2.0 XML for Web Multimedia").

Regarding claim 15, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein the user interactions are described by the Interactions Module **(Linking – page. 82)**.

Regarding claim 16, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein characterized by dynamically binding media items to a specific region on the visual rendering surface of the mobile display device with initiated by changes of the current Qos **(Fig. 16 Picture of streaming client)**.

Regarding claim 17, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein characterized by dynamically binding widgets to a specific region on the visual rendering surface of the mobile display device initiated by changes of the current situation **(Fig. 16 Picture of streaming client)**.

Regarding claim 18, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein extending or newly specifying at least one attribute of at least one element of the Layout Module in order to adapt a visual component of a specific media item to the dimension of those regions on the

mobile display device which are intended for multimedia presentations by scaling a visual size of said media item or replacing the said specific media item **(Fig. 5. Modified SMIL file after content segmentation)**.

Regarding claim 19, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein describing the alternative media items of the MediaItems Module used in the Adaptation Module by means of media-specific information encompassing bandwidth and size of the visual portion of a multimedia presentation, meta information encompassing a name, genre, and actor of the alternative media items or Universal Resource Identifiers (URIs) **(Fig. 7 shows an example of the SMIL file whose content locations are modified to indicate surrogate locations. The original URLs of the segments shown in Fig. 5 are replaced by the surrogate URLs. The locations of the segments could be different).**

Regarding claim 21, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein continuously monitoring network conditions, and selecting one of the alternative media items when current QoS **("RTP monitoring agent" and a QoS control mechanism utilizing the RTP monitoring agent – page. 657 "QoS Control Surrogate")**.

Regarding claim 22, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Yoshimura further teaches wherein the selecting includes using priority attributes of the alternative media items **(ALTQ provides packet classifier, packet**

scheduling disciplines including Priority Queueing – page 658 "System Prototype").

Regarding claim 23, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein, comprising using a Par Element of the Adaptation Module for defining a simple time grouping in which multiple elements must be played back at the same time **(The <par> element specifies that its children play in parallel, starting in the same time – page. 81)**.

Regarding claim 24, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Rutledge further teaches wherein, the adaptation possibilities are calculated with the Boolean term expressed by a Disjunctive Normal Form (DNF) on a set of different media items, wherein a choose element is considered as an OR operator **(the <seq> element is a sequence of videos plays each video unitl it ends, the starts the next video - page. 81)** and a par element as an AND operator, from which one conjunction of the Disjunctive Normal Form (DNF) **(The <par> element specifies that its children play in parallel, starting in the same time – page. 81)**

Yoshimura further teaches wherein the adaptation possibility, is selected, depending on the (QoS) of the applied networks, the mobile device capabilities and the user context **(Fig. 14-16 - QoS)**.

Claims 4, 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over **RUTLEDGE L**: "SMIL 2.0: XML for Web multimedia" IEEE INTERNET COMPUTING,

IEEE SERVICE CENTER, PISCATAWAY, September 2001, in view of **Epstein** U.S Patent No. **US 7058802** further in view of **Yoshimura: "**Mobile Streaming Media CDN Enabled by Dynamic SMIL**", MAY 2002** in view of **Barrus** US Patent No. **US 6,693,652.**

Regarding claim 4, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above.

However, Rutledge, Epstein and Yoshimura do not explicitly disclose "the step of describing the constraints of the adaptation process"

Barrus teaches that it is well known to have a system wherein the step of describing the constraints of the adaptation process in a Constraints Module **(Fig. 1, unit 150 "Control unit"; Fig. 16)** in order to make the system more efficient to provide an influence system where electronic documents or media files are generated by one or more application programs executed by control unit including, without limitation for example, a program written in Java running on top of an operating system like WINDOWS.RTM. or UNIX.RTM. based operating systems where a media file may be able to run in different media configurations.

Thus, it would have been obvious to one ordinary skill in the art to modify Rutledge's invention by utilizing a control unit to provide an influence system where electronic documents or media files are generated by one or more application programs executed by control unit including, without limitation for example, a program written in Java running on top of an operating system like WINDOWS.RTM. or UNIX.RTM. based

operating systems where a media file may be able to run in different media configurations, as taught by Barrus (Fig. 1, 16).

Regarding claim 27, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Barrus further teaches wherein, characterized in that the startmode attribute can take one of the following values: a restart value, which indicates that the media item should always start from the beginning, a resume default value, which indicates that the media items should always start from the position it stopped, a laststop value, which indicates that the media item should always start at the media time the last continuous media item contained in the same "choose" element stopped, a "playtime" value, which indicates that the media item should always start at the time, which is the combined playtime of all media items contained in the "choose" element since the "choose" element is started, and a contplaytime value, which indicates that the media item should always start at the time, which is the combined playtime of all continuous media items contained in the "choose" element since the "choose" element is started **(a set of on-screen or physical buttons are used to control recording. Buttons for audio control are well-known and include "Record", "Play", "Stop", "Pause", "Fast Forward", "Rewind" – col. 5, lines 57-60**.

Regarding claim 28, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Barrus further teaches wherein, the Adaptation Description Module supplies the choose element with an onremove attribute specifying what happens after a continuous media item is played back **(Fig. 2A -- In one embodiment, as recorded audio is replayed, progress puck 233 moves along audio gauge 232 so as to**

indicate both the amount of recorded audio replayed as well as the amount of recorded audio remaining to be replayed).

Regarding claim 29, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Barrus further teaches wherein, the Adaptation Description Module provides the choose element with an evaluation attribute which specifies if the content model of the element choose is evaluated once at start-up time, repeatedly in a specific time period or continuously while playing back the multimedia presentation **(Fig. 2A -- In one embodiment, as recorded audio is replayed, progress puck 233 moves along audio gauge 232 so as to indicate both the amount of recorded audio replayed as well as the amount of recorded audio remaining to be replayed).**

Regarding claim 30, Rutledge, Epstein and Yoshimura taught the method according to claim 1 above. Barrus further teaches wherein, characterized in that the Adaptation Description Module provides the choose element with an empty attribute which supports the functionality that the set of media appropriate for specific current situation can be empty **(user presses stop button or when the system detects end of speech – col. 10, lines 4-6)**.

Regarding claim 31, Rutledge, Epstein, Yoshimura and Barrus taught the method according to claim 30 above. Rutledge further teaches wherein, the evaluation of the associated priority of an adaptation possibility is done by sorting all children of a par element according to their priority, merging a configurations of a first two child elements by an AND operator in such a way that priority of the resulting configurations include a

priority of the higher prioritized child appended with the priority of a lower-prioritized child, and repeatedly merging the result with all other children of the par element **(the <seq> element is a sequence of videos plays each video unitl it ends, the starts the next video; The <par> element specifies that its children play in parallel, starting in the same time – page. 81)**.

Response to Amendment

Applicant's arguments with respect to claim(s) have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's argument filed on 6/21/2010, have been fully considered but they are not persuasive. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication

or earlier communications from the examiner should be directed to Sulaiman Nooristany whose telephone number is (571) 270-1929. The examiner can normally be reached on M-F from 9 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu, can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SN 9/3/2010

/KAMAL B DIVECHA/

Primary Examiner, Art Unit 2451